LAND USE SURVEY & ANALYSIS & LAND DEVELOPMENT PLAN HOLDEN BEACH, NORTH CAROLINA

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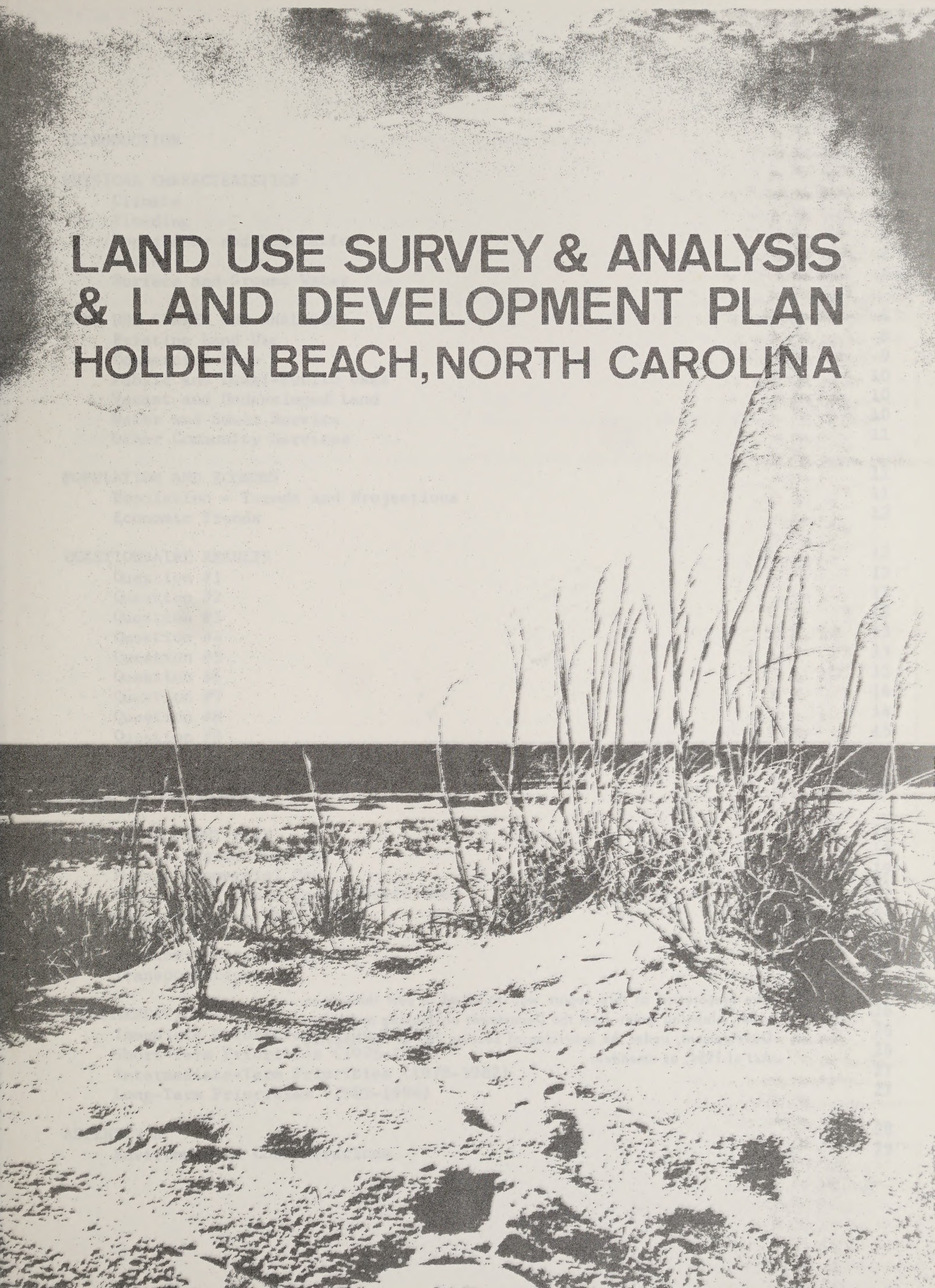
LAND USE SURVEY & ANALYSIS
& LAND DEVELOPMENT PLAN
HOLDEN BEACH, NORTH CAROLINA



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INTRODUCTION

This report presents the Land Use Analysis and Land Development Plan for Holden Beach. The Land Use Analysis is a classification of existing land use within Holden Beach into generalized categories. The amount of land used by each general category is totaled and the relationship between different categories is analyzed.

The purpose of both the Land Use Analysis and the subsequent Land Development Plan is to propose solutions that will give the citizens of Holden Beach a better living environment in the future; and also to aid the Town of Holden Beach in making future land development decisions.

This study was authorized under a contract between the Town Board of Holden Beach and the Division of Community Services. The land use data for this study was collected in the summer of 1973, and is the most up to date and complete land use information on Holden Beach.

This study, to be totally effective, must be a catalyst to those who have been looking for ways of improving their town. It must also represent the commencement of a coordinated total community effort to improve Holden Beach and its environs.

PHYSICAL CHARACTERISTICS

Generally speaking, there are four physical factors to be brought out in shaping Holden Beach's growth: 1) Climate; 2) Topography and vegetation; 3) Soils; and 4) Surface and ground water.

Climate

The climate of Holden Beach could be classified as oceanic, in that it is affected by the Gulf Stream and ocean breezes, and this fact probably accounts for a higher winter temperature than other towns located further inland. The summers are long and would seem hot if it were not for the sea breezes. The average July temperature is 80.4 degrees F., while the average January temperature is 47.3 degrees F. Normally freezing temperatures are not experienced between mid-March and mid-November. The mean annual rainfall is 49.7 inches and excessive rainfall or droughts are rare.

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Hurricanes are relatively infrequent on Holden Beach or the North Carolina Coast in general, the average is about one in every 10-12 years. Severe, destructive hurricanes, such as hurricane "Hazel", are estimated to about a 60-year frequency.[1]

Flooding. In 1971 the Army Corps of Engineers, upon the request of the Department of Housing and Urban Development (HUD), determined the rates of average annual flood damages for various types of residences within Holden Beach. Based on these damage rates, HUD then determined the premium rates to be charged for flood insurance. A Flood Hazard Boundary Map was also prepared in 1971 for Holden Beach (See Figure 1).

Holden Beach has been designated as having two types of flood zones, one of a special flood hazard area and the other being an area of special flood hazard with velocity, this area would be one with hurricane force winds located generally along the ocean front. Structures built in any of these two areas must be fourteen feet above the mean sea level (m.s.l.) mark on Holden Beach. The Town should be aware of other regulations and requirements by the Federal Insurance Administration in obtaining flood insurance for special flood hazard areas.

Topography and Vegetation

The topography is fairly common with that of other coastal communities along the North Carolina Coast in that sand dunes and salt marshes dominate the landscape. Elevations vary from mean sea level to approximately twenty feet above sea level, with the highest elevation occurring on the undeveloped area in the western portion of the island.

Vegetation in Holden Beach consists of sea oats found mostly on the dunes, marine type shrubs of various sizes located between the dunes and marshes on the intercoastal waterway. The only other principal type of vegetation would be the marshes themselves consisting of cordgrass, bulrushes, and cattails.

Soils

Soils should play an important part in determining the development pattern of Holden Beach. Just as all soils are not suitable for agriculture, all soils are not suitable for urban development. Two principal characteristics which make particular soils unsuitable for development are low load bearing properties and a high water table. Other characteristics which may affect the suitability of an area for development are the shrink-swell potential, the permeability, and acidity of the soil.

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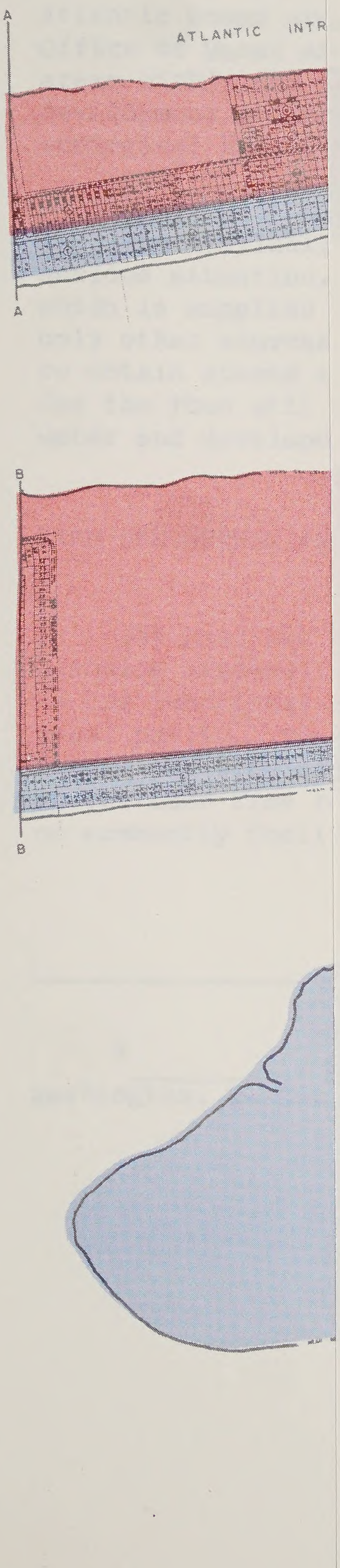
[1] Preliminary Report on Wind-Tide Flooding in New Hanover County, N.C., Corps of Engineers, Wilmington, N.C., 1969, p. 3.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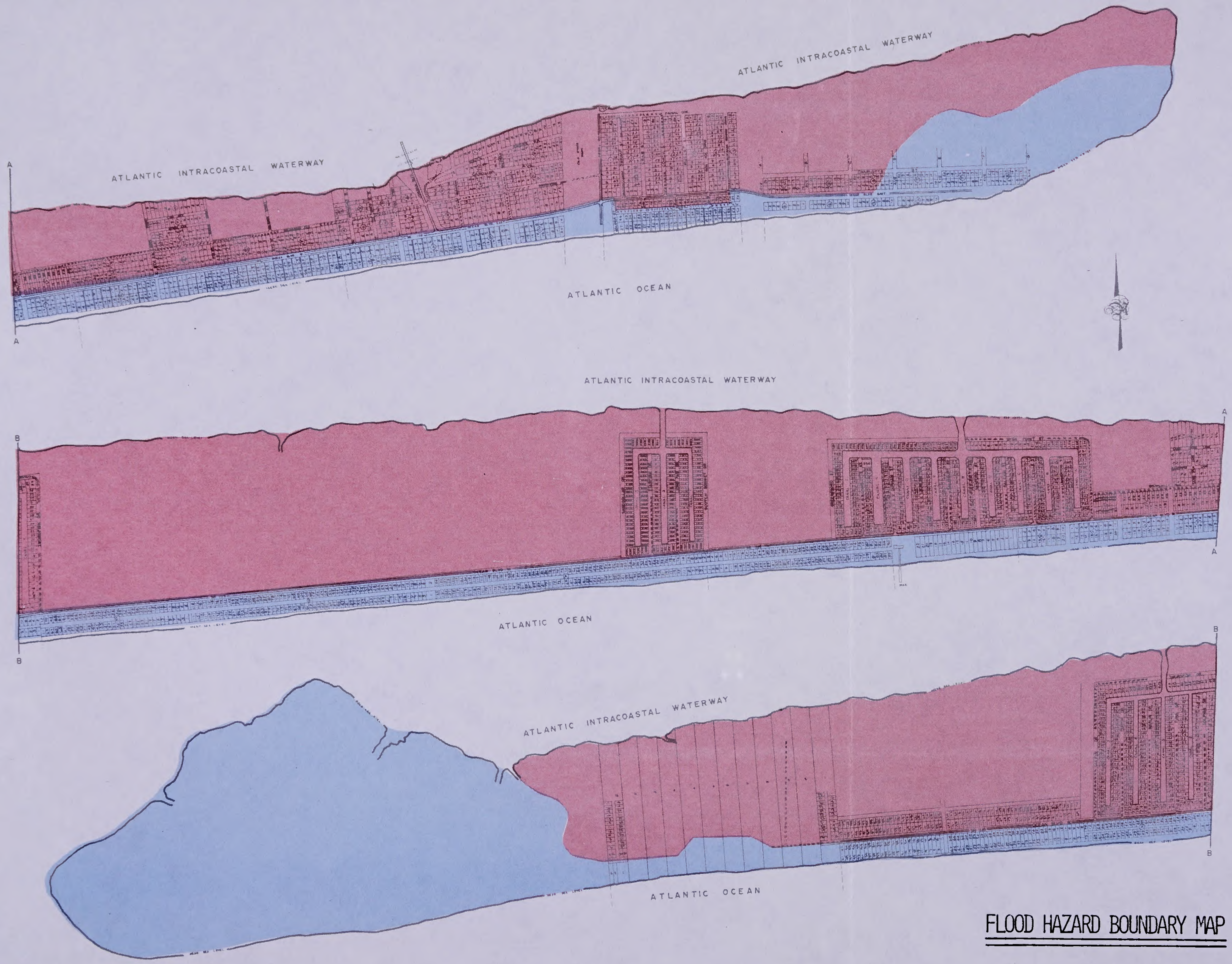
HOLDEN BEACH

NORTH CAROLINA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FLOOD HAZARD BOUNDARY MAP

🟥 FLOOD HAZARD AREAS

🟦 FLOOD HAZARD AREAS WITH VELOCITY

FIGURE 1

HOLDEN BEACH

NORTH CAROLINA

FLOOD HAZARD AREAS

There are only two soil types present in Holden Beach. They are Coastal Beach and Tidal Marsh,[2] these are delineated on Figure 2. In general, both of these soil types are not suitable for development when associated with a high water table. The general suitability of the soil types for various uses is outlined in Table 1.

Surface and Ground Water

As would be expected, the main surface water bodies in or around Holden Beach which will affect Holden Beach's growth pattern are the Atlantic Ocean, Intercoastal Waterway, Shallotte River, and Lockwoods Folly Inlet. All but the Atlantic Ocean are classified as "SA" Shellfish Waters by the North Carolina Office of Water and Air Resources, making them highly productive estuarine areas within the State. The environmental effect of development or proposed development around these areas should be carefully considered, since the ecological balance of these areas is so delicate.

The availability of ground water in Holden Beach is rapidly becoming a serious situation. The present water supply is obtained from ground water which is supplied by two 3-inch wells drilled to a depth of twenty feet. The only other sources of water are individual wells drilled to a shallow depth to obtain stored rain water in the soil (ground water). This source of water for the Town will not be adequate in the near future. The relationship of water and development is outlined in Table 2.

LAND USE SURVEY AND ANALYSIS

The Land Use Survey is a key investigation preparatory to long-range planning studies; the survey classifies and records the uses of land according to the functional activities of residential, commercial, and public and quasi public. The objectives of an effective plan must include recommending future patterns of land use that are consistent with existing development and at the same time recognize the potentials of the area and the impact of growth on community facilities.

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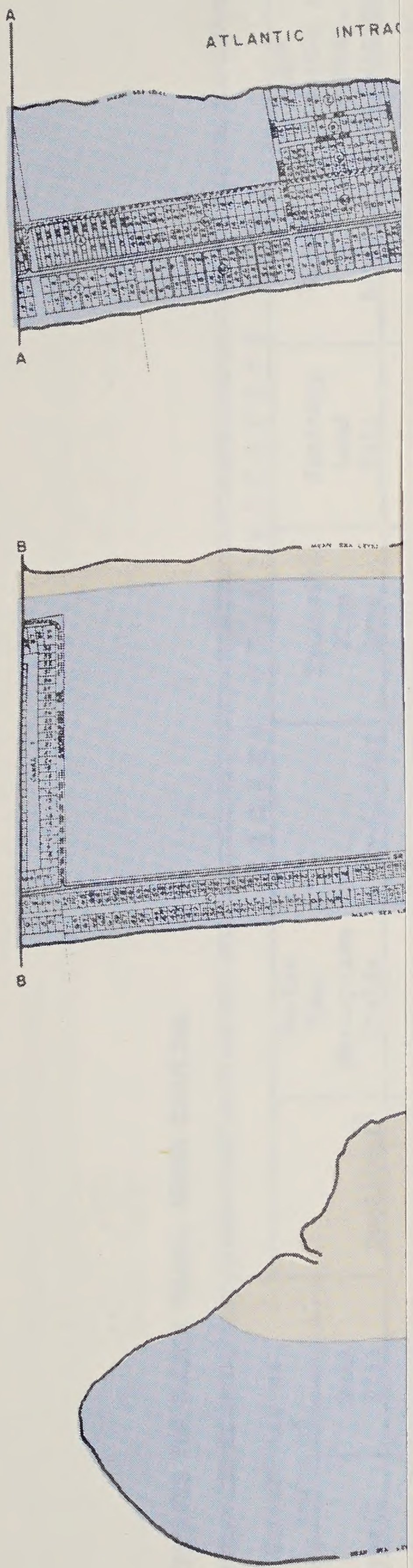
[2] ________, Soil Survey: Brunswick County, North Carolina, (U.S.G.P.O.), Washington, D. C., 1973, p. 32.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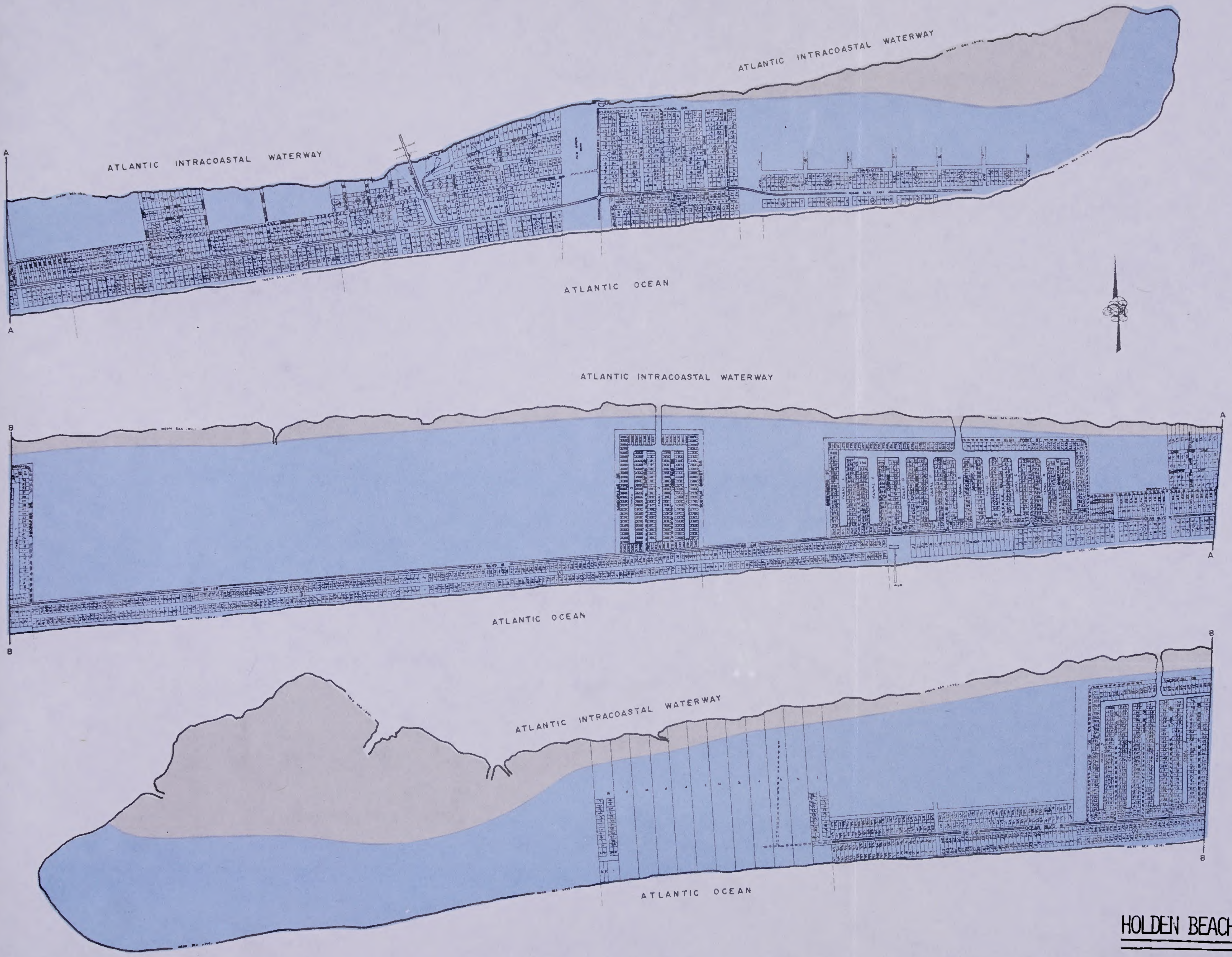
NORTH CAROLINA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HOLDEN BEACH SOILS

🟦 COASTAL BEACH

▨ TIDAL MARSH

FIGURE 2

HOLDEN BEACH

NORTH CAROLINA

COASTAL BEACH

TIDAL MARSH

FIGURE 2

Table 1
SOIL INTERPRETATIONS FOR HOLDEN BEACH, NORTH CAROLINA

Soils Name	Suitability as Soure of		DEGREE OF LIMITATION FOR									
	Topsoil	Road Fill	Dwellings[1]	Septic Tank Absorption Fields	Composites	Intensive Play Area	Sanitary Land Fill	Roads & Streets[2]	Light Industry & Low Bldg. Foundation	School Sites	Soil Features Affecting Agriculture Drainage
Coastal Beach	Poor; Very low Fertility	Good; if soil binder is added	Moderate	Moderate, low filtering action, rapid permeability	Severe; trafficability; susceptable to soil blowing.	Very severe trafficability	Very severe, sandy subsoil	None to sli slight if confined.	Moderate; corrosion potential.	Moderate corrosion potential.	Not needed
Tidal Marsh	Very poor; poor accessibility.	Poor high water table; tidal flooding.	Very severe; tidal flooding.	Very severe; tidal flooding.	Very sever; tidal flooding.	Very severe; tidal flooding	Very severe; tidal flooding; high water table.	Very severe; tidal flooding; high water table.	Very severe; tidal flooding; corrosion potential	Very severe; tidal flooding; corrosion potential.	Tidal flooding

Source: Brunswick County Soil Conservation Agent.

[1] Structures whose footings are on subsoil.

[2] Refers to roads and streets that have subsoil for base.

Table 2
TOLERANCE AND SUITABILITY OF WATER FEATURES TO DEVELOPMENT

Feature	Suitability	Permitted Uses	Restrictions	Implementation
Surface Water and Riparian Land	Value for water supply, waste dispersion, transportation, recreation power generation, source of food, scenic beauty quality and quantity of water needs to be maintained.	Harbors, water/sewage treatment plants, recreation, marinas, water related industry, cluster development, public access points.	No pollutors (including septic tanks); no non-water-related development that will produce undesirable changes in surface water quality.	Planned unit development controls; sanitary ordinance prohibiting use of septic tanks; water quality standards to restrict discharge of pollutants; water zoning to separate incompatible water users; zoning to restrict shoreline development to water compatible uses; public works planning
Floodland	Essential role in carrying excess water during floods; danger to life and property; provides recreational land; filling, damming or leveeing decrease storage capacity and flood velocity increasing flood potential downstream; soils often very fertile and suitable for agriculture, usually contains substantial ground water.	Those unharmed or improved by flooding; e.g., those associated with surface water and riparian land and forestry, so some types of agriculture, extensive recreation, institutional open space, open space for housing and other uses, impoundment basins.	Same restrictions as for surface water and riparian land; floodproof development; filling and diking only where essential and where flow is not seriously restricted.	Same methods as for surface water and riparian lands; zoning controls to exclude structures from the channel and floodway; building codes requiring flood-proofing of structures; limitations on grading, filling, dredging, and diking.
Wetland: Marsh, Bog, Swamp	Act as sponges to absorb run-off; reduces flooding potential; important wildlife habitats; recreational; educational, scientific value; some agricultural value; often have scenic beauty; filling may cause flooding elsewhere.	Recreation: hunting, fishing, sailing, observing; scientific investigations; certain types of agriculture.	No on-site peripheral development which will interfere with maintenance of the ecosystem, especially its water storage and wildlife maintenance ability.	Public purchases or purchase of easbments; grading and filling ordinances; agricultural zoning limitations on surrounding areas to preserve ecological processes; e.g., withdrawal of water, diking, cutting of channels, excessive development; conservation zoning.
Estuary	As the breeding ground for a great variety of organisms, estuaries are particularly intolerant to waste disposal, dredging, and filling; these activities can destroy important plant and animal communities such as oyster beds and spawning areas.	Fishing, shell fishing and other harvesting, recreation, limited associated urban development.	No development which reduces the ability of the estuary to support plant and animal life, e.g., pollutant discharges, dredging, filling excessive recreation or overharvesting.	Increased state control over estuary and coastal zone use; more stringent U.S. Corps of Engineers control over dredging, filling, draining; zoning to restrict development to uses requiring coastal zone locations, pollution controls.

Source: Planning Advisory Service, Environmental Planning: 1; Environmental Information for Policy Formulation, PAS Report #263, (ASPO, Chicago, Illinois) 1970, pp. 30-34.

Existing Land Use

There are approximately 1,710 acres of land in Holden Beach of which only about 8.4 percent (approximately 144 acres) is developed for urban purposes.

Five categories were used in recording the land use:

1) Residential
2) Commercial
3) Public and quasi public
4) Mobile Homes
5) Vacant and undeveloped

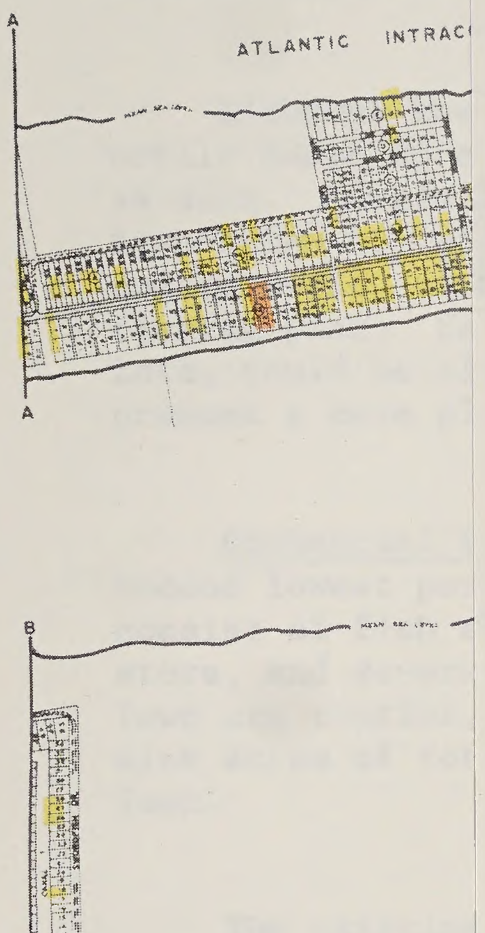
Subsequently, these uses were recorded on a map of existing land use (Figure 3), and in Table 3.

Table 3

HOLDEN BEACH LAND USE

Use	Acres	% of Developed Land	% of Total Land
Residential	107	74.3	6.3
Commercial	9	6.2	.5
Public & Quasi Public	23	15.9	1.3
Mobile Homes	5	3.5	.3
Vacant & Undeveloped	1,566		91.6
Total Land	1,710		100%

Source: Division of Community Assistance.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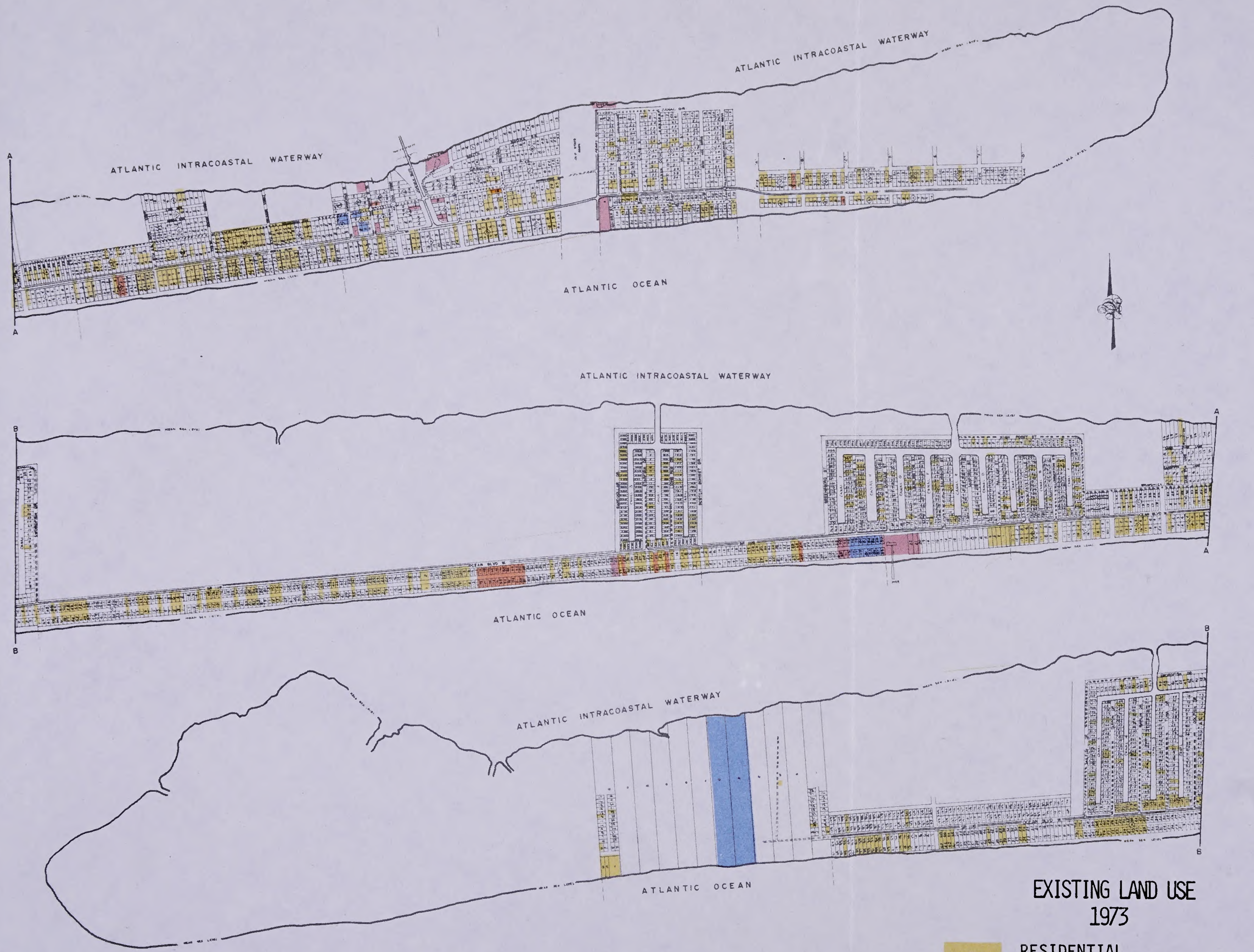
HOLDEN BEACH

NORTH CAROLINA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EXISTING LAND USE 1973

🟨 RESIDENTIAL

🟧 MOBILE HOMES

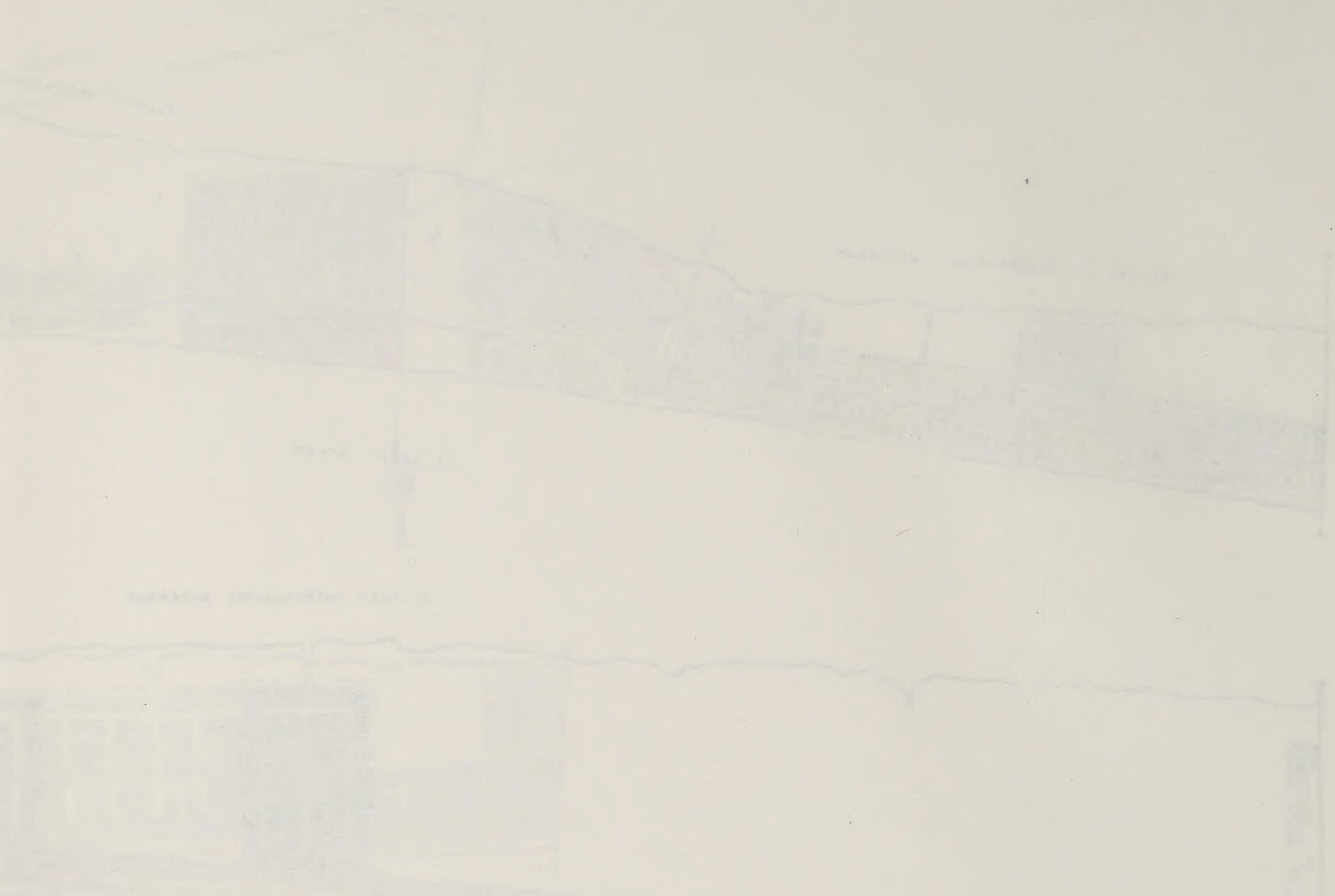
🟥 COMMERCIAL

🟦 PUBLIC AND QUASI-PUBLIC

VACANT AND UNDEVELOPED LAND

FIGURE 3

HOLDEN BEACH
NORTH CAROLINA



EXISTING LAND USE
1975

RESIDENTIAL

▨ MOBILE HOMES

▨ COMMERCIAL

▨ PUBLIC AND QUASI-PUBLIC

VACANT AND UNDEVELOPED LAND

FIGURE 2

Residential Land Use. The amount of residential land in Holden Beach includes 107 acres or 6.3 percent of the total developed land in the town. Residential use as it applies to Holden Beach includes all single and two-family dwellings and apartments. The nature of this residential land use is primarily single family resort cottage type development. Most of these homes are seasonally occupied (83 percent), while 17 percent are year-round owner occupied. There is no real concentration of permanent homes in any particular area of the Town, just as there is no permanent concentration of rental cottages. Both permanent and rental homes appear to be scattered throughout the Town along Ocean Boulevard as well as along the canals. Almost all of the 570 residential structures on Holden Beach could be classified as sound with no unsound structures existing.

Although the mobile homes classification was categorized separately, mobile homes do constitute a residential structure and should be looked upon as such. Mobile homes, both in parks and on individual lots,consisted of five acres of total land or 3.5 percent of developed land. By far the largest concentration of mobile homes is in the mobile home park just west of the fishing pier. Some of these mobile homes, both in the park and on individual lots, could be classified as unsound. Some, at least, should be able to present a more pleasing appearance to other compatible residential structures.

Commercial Uses. Next to mobile homes, commercial uses account for the second lowest percentage of uses in the Town. Commercial uses generally consist of fish and bait shops, a few sea shell shops, one small grocery store, and several small motels. Most of the commercial enterprises in the Town are tourist, or at least seasonal, oriented. Commercial uses comprise nine acres of total land, accounting for 6.2 percent of developed land in the Town.

The existing pattern of commercial development is concentrated along the entrance to Holden Beach on both sides of Jordan Boulevard. The Holden Beach Fishing Pier and recreation area also constitute a small cluster of commercial development together with the Surfside Pavillion and several bait and fish stores east of the bridge along the Intercoastal Waterway. A Central Business District (CBD) as the name implies and as planners know exist, does not really occur in Holden Beach. This is to be expected and may continue to remain as such since Holden Beach is resort oriented with peak populations occuring in the summer months, thereby is currently not capable of supporting a well defined, high density CBD. As time goes on, however, this could change.

Motels or hotels are few in Holden Beach and occupy only a small percentage of developed land. The motel by the Holden Beach Fishing Pier and the one adjacent to Sanddollar Drive are the only motels in the Town. Both are small, having only between eight and ten units.

Public and Quasi-Public Uses. The land uses in this category include churches, campgrounds, and other recreational facilities, post offices, town halls, water treatment plants, fire stations and police stations. For the purposes of Holden Beach, four of these apply:

1) The Holden Beach Town Hall
2) The Post Office
3) The Holden Beach Chapel
4) The Sand & Sea Campground and Fishing Pier Campground.

The above uses constitute 23 acres of total land or 15.9 percent of developed land within the Town. Recreation by far dominates this category, not only by the two private campgrounds in the Town, but also the several miles of beach front. The beach itself is the real "backbone" as to why Holden Beach exists today. Natural recreational development in Holden Beach is of prime importance to the Town and its residents and other property owners, both now and in years to come.

Vacant and Undeveloped Land. This category is not really a land use per se, but does consist of the largest majority of land in the Town. Vacant and undeveloped land accounted for 1,566 acres or 91.6 percent of the total land in the Town. Some of this land, however, is not suitable for development or should not be developed; this would include large sections on both ends of the island.

On the eastern end of the Island by Lockwoods Folly Inlet there has been much erosion over past years. Although "beach berms" are being used to slow the rate of erosion, this area should remain undeveloped in the future. Also the marsh land on the western end of the Island near the Shallotte River should not be developed. Not only is this area of great environmental concern, but it also adds tremendous aesthetic value to the Town. The "filling-in" of marsh land for development should be discouraged whenever feasible.

Any other areas, particularly along the Intercoastal Waterway, which may produce negative effects on the environemnt if developed, should remain in their natural state.

Water and Sewer Service

As mentioned earlier, the present method of obtaining (from groundwater using wells) water is rapidly becoming inadequate to handle present population levels, (much less future population levels) let alone the health hazards that could result by septic tank seepage into existing wells. The Town is moving in the right direction by initiating a water system to handle future development. (See page 24)

The present sewerage system is that of individual septic tanks. However, when the concentration of the effluent nitrification fields and septic tanks saturates the area, a sewer system will be required.

Other Community Services

Garbage collection is supplied by the town which operates two trucks which pick up once a week during the winter months and twice a week during the summer. It remains to be seen whether or not an increased collection system will be necessary during the planning period (1974-1994).

Police protection is also offered by the town with two permanent full-time officers. Fire protection is supplied by the Tri Beach Fire service located across the bridge on the mainland.

Hospitals are located at Southport and Wilmington with rescue service coming from Shallotte.

POPULATION AND ECONOMY

The permanent population of Holden Beach, based upon the 1970 Census, is 136. Past population figures are not available because the town was not incorporated until 1969. Also population characteristics, such as sex and age, are unavailable at this time, however an attempt will be made to estimate future population projections up to 1994 based on available data.

Population Trends and Projections

In 1950 the estimated population of Holden Beach was 30, by 1960 this figure remained approximately the same, 30 inhabitants.[3] The lack of increased population was a result of hurricane "Hazel" which struck the coast in 1954 causing wide-spread damage, particularly to the lower Brunswick County beaches. By 1970 the permanent residents of the town had increased to 136 or a 353 percent increase. If this trend continues; a permanent population of approximately 1,694 could be expected by 1994. If one also considers the present summer population of approximately 5,000 people, the total population, both permanent and seasonal, could be over 15,000 people by 1994.[4]

---

[3] Interview with John Holden, November, 1973.

[4] Based on Arithmetic Mean Projections.

These figures should not be considered rigid or binding on the town since they do not take into account social and economic factors occuring over the next twenty years, nor do they take into effect such factors as water and sewer facilities, cost of land acquisition, and environmental factors affecting future development.

Economic Trends

By far the most dominating industry of Holden Beach is tourism, not the Myrtle Beach type tourism, but on a much smaller and different scale. The resort business in Holden Beach is predominately cottage and apartment rental in nature, with local realtors renting on a daily, weekly, or monthly basis. The Holden Beach Fishing Pier Motel is also available to people who desire this type of unit as opposed to single family cottages or apartments.

With respect to other densely populated tourist areas along the coast, Holden Beach does not have the carnival atmosphere as some other areas do. It is not expected that Holden Beach will ever become such an area.

Commercial fishing is the only other industry located in Holden Beach. This industry is very small with little chance for any major expansion. However, to remain prosperous, Lockwoods Folly Inlet and the Shallotte Inlet must be dredged to accommodate larger commercial vessels.

It is doubtful whether any large scale industry would locate in Holden Beach for many reasons. Most of the industrial location should and would locate more inland away from the beach itself. The resort industry appears to be the major industry to continue to dominate Holden Beach's economic development in the future.

DEVELOPMENT QUESTIONNAIRE RESULTS

A Land Development Survey was sent to 800 property owners to determine their views as to the course of development they most desire for Holden Beach and to establish certain goals for the town to pursue. (See Table 4). Of the 800 questionnaires mailed, 298 (or 37.3%) were returned for tabulation. The views that follow are based on the responses of those questionnaires that were returned.

Question #1

This question was asked to determine whether or not the respondent was a permanent resident of Holden Beach. Of those property owners who responded, 280 (93.9 percent) said they did not live in Holden Beach year round, while 5.7 percent did. Town records indicate 17 percent of the property owners are permanent residents, so that the survey contains a larger portion of responses from non-permanent owners than might be desirable.

Question #2

This question attempted to ascertain what portion of the year non-permanent residents stayed in Holden Beach. Fully 58.7 percent of those persons gave no definite answer, either because the question seemed ambiguous or because their "stays" at Holden Beach were sporatic and of varying durations. Of the remainder, 18.1 percent lived at Holden Beach three months or less in any given year, 6.4 percent for four months, 4.0 percent five months, and 12.0 percent for six months or more. A number of non-permanent residents did indicate, however, that they planned to make Holden Beach their permanent home upon retirement.

Question #3

This question determined the home cities of non-permanent residents. Fourteen percent had permanent homes within 100 miles and within the state. 59.7 percent were from towns within North Carolina, but more than 100 miles from Holden Beach. Many of these persons were from larger cities such as High Point, Raleigh, Charlotte, etc. Out-of-state residents totalled 18.8 percent of the non-permanent residents, coming largely from neighboring states of South Carolina, Virginia, and Georgia, but with others from as far as Massachusetts and California. Three percent gave no answer to this question.

Question #4

The fourth question offered several choices or reasons for the purchase of land in Holden Beach. Those reasons given most often were:

1) Quiet - 70.8%
2) Pleasant surroundings - 64.8%
3) Reasonably priced house or land - 41.3%

Of the remaining choices, 18.5 percent included good place to raise children, 13.8 percent mentioned close to friends and relations, 3.0 percent listed close to work, 10.7 percent included low taxes and 14.1 percent stated other reasons (including family atmosphere, retirement home, health, and lack of commercial development). Five percent of the respondents failed to answer this question.

Question #5 and #6

These two questions seem to be interrelated. Apparently property owners felt that if a particular item needed improvement (Question #5), it was also an area that had been neglected in the past (Question #6). Thus, many respondents duplicated their answers or failed to answer the sixth question. Most people gave more than one answer to either question. The answers were grouped under general areas of concern both for ease of tabulation and to suggest items that were most significant.

Suggestions for improvement (Question #5) were concerned primarily with developing a city water and sewer system (41.3 percent). The second major concern was for the beach, both erosion (14.1 percent) and access (12.1 percent). This ecological concern of erosion also included remarks concerning the dredging of canals, conservation of marshland, and litter on the beach. Six percent of the answers reflected a desire for planning and zoning; 5.4 percent desired streets to be paved and well lighted; and 3.0 percent suggested limiting mobile homes either in numbers or in areas where they could be located; 2.7 percent wished for more entertainment features (particularly for teenagers), and 2.0 percent wanted another bridge to the mainland. Twelve percent gave no answer to this question.

Items deemed to have been neglected (Question #6) closely parallel the items mentioned in the fifth question, although fully 41.3 percent gave no answer, again apparently due to the overlapping of the questions. Here 11.7 percent were concerned about a water and sewer system. Beach concerns were reflected as follows: seven percent were concerned about litter; 9.7 percent about beach access; and 2.7 percent about beach erosion. Several respondents (4.7 percent) were concerned about the general area of law enforcement, running the gambit from forbidding dogs on the beach to speeding, with a general request for more stringent enforcement of existing local ordinances. Seven percent mentioned the apparent lack of planned development, while 1.3 percent wanted street improvements made, 3.7 percent felt that canal maintenance (including dredging) had been neglected, and 2.3 percent felt that mobile homes had not been properly limited.

Question #7

The seventh question asked for approval or disapproval of the general question of further commercial development on Holden Beach. The overwhelming majority (67.4 percent) did not favor further commercial development, with those in favor numbering 28.9 percent. However, it should be noted that while most disapproved of commercial development (quite often labeled as "honky-tonk"), many of these people did suggest that a few commercial establishments, such as laundry, gas station, grocery store, drug store, motel, and some recreation area, be permitted as a convenience and service to the residents and not so much as an attraction to the weekend commercial tourist trade that may be found in other communities on the northern coast of North Carolina.

Question #8

Question number eight was concerned with multi-family housing units, again in the framework of approval or disapproval. Here again, disapproval (78.2 percent) was stronger. However, some who disapproved did so on the basis that a water and sewer system would have to be installed first. Those who approved (16.8 percent) quite often did so on the basis of permitting two-family units or to avoid more mobile homes and campers.

Question #9

The last question asked for a general view as to how Holden Beach should develop in the future -- what objectives should be kept in mind during the planning process. Fully 59.1 percent of the property owners wanted Holden Beach to retain its character as a family beach, with a minimum of commercial development and a concern for preserving the ecological character of the community. Other concerns were listed by 30.7 percent, often duplicating previous answers in reference to the canals, preserving marshes, enacting zoning and a water and sewer system. Several of the non-permanent residents were concerned that they had little or no voice in community affairs and that there were few community activities with which they could become involved. No answer was given to this question by 10.7 percent.

Summary

In general, while the vast majority of property owners are content with the family beach atmosphere of the town and want Holden Beach to retain its character. They also wish the town to expand the services it offers its citizens (particularly a water and sewer system) and to take positive steps to insure that Holden Beach remains ecologically sound as it now is. Some development in a commercial sense is both needed and wanted, but this development should proceed with cautious planning and zoning. Perhaps the general course of development desired can be best summarized by an often repeated answer to the ninth question, "How would you like to see Holden Beach develop in the future?" -- "Slowly, as a family beach."

Table 4
LAND DEVELOPMENT SURVEY - RESPONSES TO QUESTIONS

QUESTION 1 DO YOU LIVE IN HOLDEN BEACH YEAR ROUND?	QUESTION 2 LENGTH OF STAY IN HOLDEN BEACH?	QUESTION 3 WHERE IS YOUR PERMANENT HOME?	QUESTION 4 REASONS FOR CHOOSING HOLDEN BEACH BEACH?	QUESTION 5 IMPROVEMENTS DESIRED?	QUESTION 6 ITEMS NEGLECTED?	QUESTION 7 MORE COMMERCIAL DEVELOPMENT?	QUESTION 8 MORE MULTI-FAMILY HOUSING?	QUESTION 9 GENERAL CONCEPT OF DEVELOPMENT?
Yes 5.7%	No Answer 58.7%	In North Carolina and Within 100 Miles from Holden Beach 14.1%	Price 41.3%	Water & Sewer 41.3%	Water & Sewer 11.7%	Yes 28.9%	Yes 16.8%	As a Family Beach 59.1%
No 93.9%	3 Months or Less 18.1%	In North Carolina and More than 100 Miles from Holden Beach 59.7%	Raising Children 18.5%	Beach Erosion 14.1%	Beach Litter 7.0%	No 67.4%	No 78.2%	Other particular Concer 30.7%
	Four Months 6.4%	Out of State 18.8%	Friends & Relatives 13.8%	Beach Access 12.1%	Beach Access 9.7%			No Answer 10.7%
	Five Months 4.0%	No Answer 3.0%	Quiet 70.8%	Planning & Zoning 6.0%	Beach Erosion 2.7%			
	Six Months Plus 12.0%		Pleasant 64.8%	Streets 5.4%	Planning 7.0%			
			Work 3.0%	Limit Mobile Homes 3.0%	Streets 1.3%			
			Low Taxes 10.7%	Recreation 2.7%	Mobile Homes 2.3%			
			Other 14.1%	Another Bridge 2.0%	Canals 3.7%			
			No Answer 5.0%	No Answer 12.4%	Law Enforcement 4.7%			
					No Answer 41.3%			

Source: Division of Community Services.

GOALS FOR DEVELOPMENT

As a result of the Land Development Survey and the Land Use Analysis, certain goals and objectives can and must be formulated before any land development plan can be achieved. The following goals and objectives should be adopted by the town officials of Holden Beach to help guide the future development of the town.

The goals and objectives are somewhat general and flexible and will thus enable the town to update or change them as community needs and priorities change.

Goal

To create desirable living areas which would harmonize with the natural surroundings rather than destroy them.

Objectives

1) Provide adequate beach access areas (public and private) for all future residential development.

2) Adequate water supplies should be available.

3) Sewage disposal facilities should be provided in accordance with appropriate federal, state, and local health officials.

4) More attention should be given to the Town's Environmental Impact Ordinance.

5) Construction of future canals should be kept at a minimum at the very least.

Goal

Promote sufficient commercial activity to strengthen the community's tax base and insure orderly growth.

Objectives

1) Future commercial establishments in Holden Beach should be those of convenience type shopping.

2) Commercial developments should be encouraged to locate in those areas where current commercial uses already exist.

3) Parking facilities and ingress and egress should be adequate - located as much as possible away from the immediate vicinity of the water's edge.

Goal

To supply adequate community facilities and services for all future development.

Objectives

1) Establish a water and sewer system for the town as soon as possible.

2) Expand and upgrade garbage collection, police and fire protection, and rescue service as needed for future development.

Goal

Promote accessiblility and safety in area transportation.

Objectives

1) Emphasize safety and continuous street improvement and construction program.

2) Developers should be encouraged to dedicate new streets to the town.

3) Future street construction should preserve as much of the environment as possible.

Goal

Preserve and improve the physical environment.

Objectives

1) Establish adequate park and recreation areas.

2) Designate certain areas for conservation and open space.

3) Provide beach access ways.

Goal

Promote sufficient tourist, industrial activity to strengthen the community's tax base and insure orderly growth.

Objectives

1) Maintain existing areas of industrial activity, while seeking orderly and controlled expansion.

2) Dredging of the inlets (when needed) to maintain the fishing industry.

LAND DEVELOPMENT PLAN

The purpose of the Land Development Plan (Figure 4) is to guide the growth process of the Town of Holden Beach in a logical, orderly fashion to insure a well-balanced community from a physical, economic and social point of view.

The Land Development Plan represents the initial step in the planning process which was brought about through the determination of community goals and objectives and which are expected to guide the future development of the town.

Future Residential Use

Future use and acreage requirements for residential development in Holden Beach will depend a great deal on the type of housing built and the existing environmental condition. Apartments built in areas with the appropriate services would not require as much land as single family units built on 20,000 square foot lots. However, where water and sewerage systems are inadequate to handle such development, lower density development should take place.

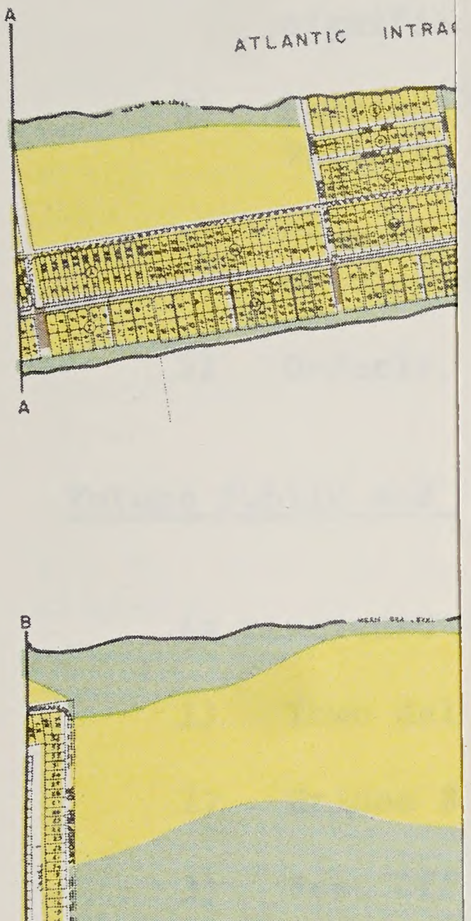
Forecasting acreage requirements for residential use would not be appropriate for Holden Beach at this time. Many people already own their home at Holden Beach and will occupy it on a permanent basis upon retirement or for any number of other reasons. Also, with construction of a water and sewer system for the town, an increase in population and home building should occur.

Areas of residential growth within the town should occur in newly developed subdivisions such as Sea Oats Acres, Colonial Beach (located in tracts 1, 8, 9, and 12 on the west end of the Island), and on the canals.

Areas of ecological or environmental concern should be avoided as possible residential development. These would primarily include dunes and marshlands.

Future Commercial Use

In considering future commercial use in Holden Beach, we must recognize the type of commercial development which should occur. The most appropriate type would be development which was neighborhood oriented or convenience type shopping both for the permanent residents and transients alike. A small grocery store such as a Stop - and - Shop, a laundry-mat, restaurant, and a small mens' or womens' apparel shop is the type of commercial establishments which could best meet the immediate and future demands of the residents.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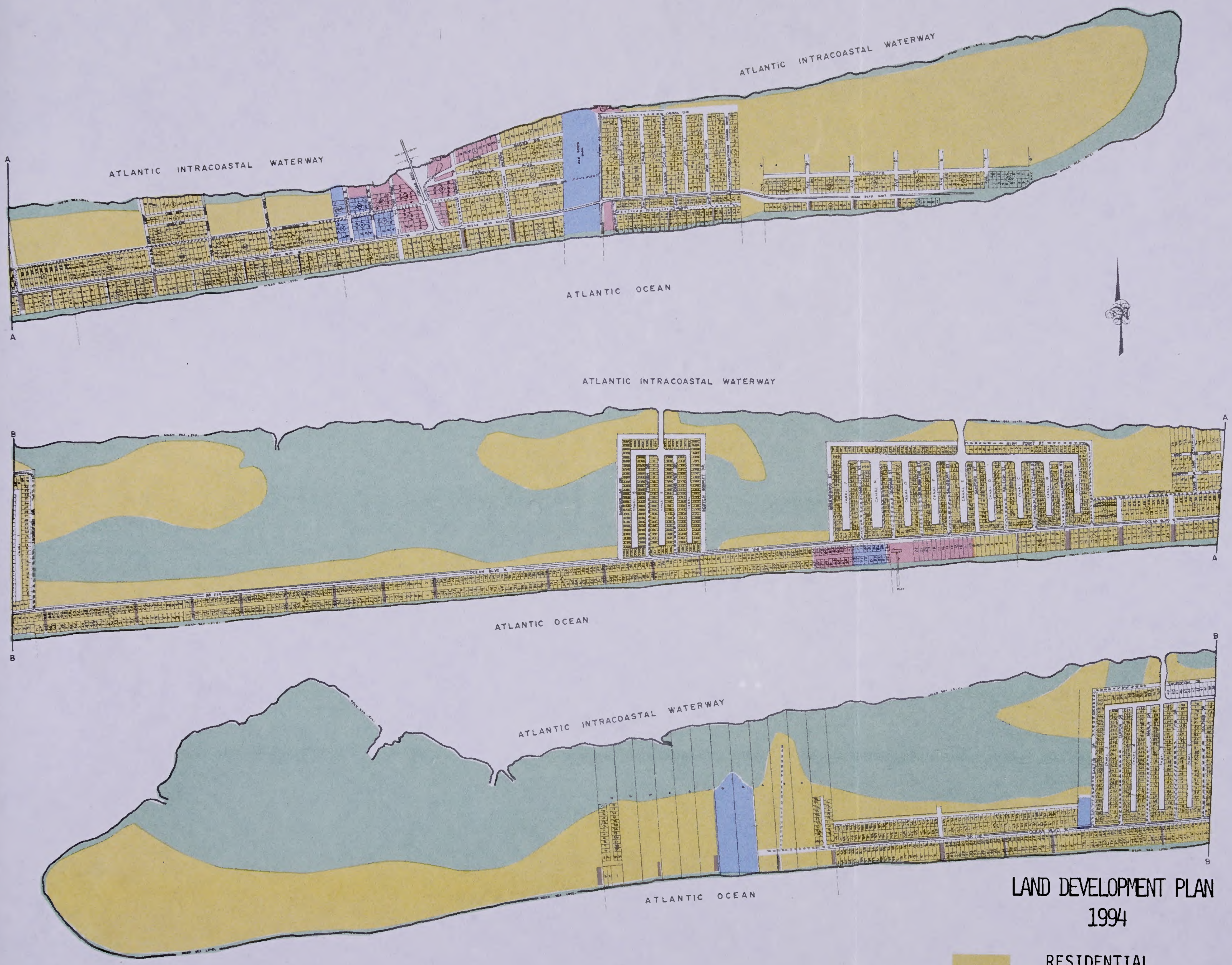
HOLDEN BEACH

NORTH CAROLINA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LAND DEVELOPMENT PLAN 1994

- 🟨 RESIDENTIAL
- 🟥 COMMERCIAL
- 🟦 PUBLIC & QUASI-PUBLIC
- 🟫 BEACH ACCESS
- 🟩 CONSERVATION/OPEN SPACE

FIGURE 4

HOLDEN BEACH

NORTH CAROLINA

LAND DEVELOPMENT PLAN

1986

FIGURE 4

Because of Holden Beach's attractiveness as a resort area, the possibility of a moderate size motel located in Holden Beach should be considered; however, adequate facilities such as water and sewer, should be available at that time. Certain guidelines should be kept in mind when developing any commercial area within Holden Beach:

1) New commercial developments should be encouraged to locate in those areas where current commercial uses already exist.

2) An assessment should be made of the effect a commercial structure will have on a scenic view significant to a given area or enjoyed by a significant number of people.

3) Parking facilities should be located inland, away from the immediate vicinity of the water's edge and recreational beaches.[5]

4) Community facilities should be able to "handle" increased commercial development.

5) Orderly, controlled commercial growth only should be allowed.

Future Public and Quasi-Public Uses

As mentioned earlier, four uses are considered in this category:

1) Town Hall;

2) Holden Beach Chapel;

3) Post Office and

4) Recreation Uses.

As Holden Beach grows, the Town's services will undoubtably increase proportionately. The very need for adequate daily town activities will dictate a need for expansion of the Town Hall and accompanying offices and departments. This expansion should occur in the immediate vicinity of the existing Town Hall.

The possibility of a small library and reading room should be considered within the same general area of the Town Hall or the Chapel. This could even take the form of a used book library where people could donate old or used books. A community service of this type would encourage community involvement, and offer alternate activities as opposed to strictly beach and recreation oriented functions.

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[5] ________, Guidelines For the Coastal Zone, Coastal Plains Center for Marine Development Services, (Wilmington, N. C., July, 1973), pp. 8-9.

Recreation is by far the major catalyst dominating future development in Holden Beach. Recreation in Holden Beach, like other coastal communities, is water-related. The recreational activity may either be an active one involving boating, swimming, and fishing, or the activity may be passive such as enjoying the natural beauty of the dunes or the vast expanse of the Atlantic Ocean.

However, it is important that Holden Beach offer other modes of recreational activities. This could be accomplished by the Town becoming actively involved in a recreational program for the beach. Recreational parks should be developed offering such activities as picnicking, tennis, baseball, and childrens' play areas.

As an indication of the Town's willingness to be involved in a recreation program, a bicycle path is proposed to be located along the entire length of Ocean Boulevard. The path will be approximately eight feet in width and built by the State Highway Commission. Also, within Holden Beach, two areas exist which could be developed for recreational uses. One is located in what is designated as Old State Park on the Town Map lying approximately a quarter of a mile east of the bridge. This area has about twenty acres of land, some of which could be developed for recreational activity as previously described. This area is large enough to serve all of Holden Beach during the Planning Period (1974-1994).

The second area lies adjacent to Sailfish Drive and on the north side of Ocean Boulevard. This area could be developed as a small "vest-pocket" park for residents in the western end of the island. This area, designated in Figure 4, occupies about two acres of land and could be developed for such activities as picnicking and tennis. Like other future developments in the Town, recreation should also follow certain guidelines as follows:

1) The supply of recreational facilities should be directly proportional to the proximity and density of the population. In the case of Holden Beach the permanent and seasonal population should be used in this respect.

2) Attention should be directed toward effects the development of a recreational site will have on environmental quality, natural resources, aesthetic values, and scenic views.

3) Like commercial areas, parking areas should be located inland, away from the immediate edge of the water and recreational beaches. Access to the beaches should be provided by walkways no less than ten feet in width.[6]

Development of these proposed recreation areas should not be as intense as other uses included in the Public and Quasi-Public category.

Conservation - Open Space

This land use is of utmost importance to Holden Beach if it is to retain its character as a place of natural beauty and attractiveness. The conservation-open space category could be considered a preservation area within the Town.

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[6] _Ibid_, pp. 12-13.

This would include portions of the Town which have overriding ecological, hydrological, topographical, or socio-economic importance to the public at large, both permanent residents or tourists. Within Holden Beach, this would include primarily the dunes and marshlands. One need not mention the ecological damange which could occur if these areas are developed not to mention the enhancement of aesthetics and quality of life for residents and tourists. Public policy should attempt to protect these areas from development to the maximum degree legally possible consistent with private property rights as determined by the courts. Holden Beach, in this respect, is unique compared to other coastal communities in North Carolina, by requiring an Environmental Impact Statement for any major development which may significantly affect the environmental quality of the Town. Administration and enforcement of this ordinance must continue.

Beach Access

Needless to say, a major problem existing in Holden Beach is beach access and how to provide it both now and in years to come. Access ways should not only be provided for the affected property owners (although this is of prime importance initially), but should be provided for public as well as private use.

As a result of this problem, the Town Council has appointed a three member commission to study possible solutions, some of which are:

1) Public ownership of access ways by voluntary deeding of all presently recognized access ways to the Town of Holden Beach.

2) Enacting temporary legislation which would require future developers to provide adequate access to the strand. Such access-ways should be dedicated to the Town of Holden Beach and should include both pedestrian and vehicular accesses to the strand and to the Intracoastal Waterway where indicated.

3) Where none of the foregoing can be provided at no cost to the Town of Holden Beach, voluntary deeding of access-ways by ocean-front property owners should be sought. Tax allowances should be offered commensurate with a fair market value for the property deed to owners cooperating for as long as the individual cooperating owns the property. Special building variances should be given to permit building on the narrower lots resulting. Negotiated cash payments could also alternately be made to cooperating owners.

4) Where all else fails, the Town should arrange to purchase strips by condemnation proceedings. All reasonable effort should be made to ease the impact of such proceedings to minimize the amount of land condemned and by issuance of variances to permit building on narrower lots if vacant at the time of condemnation.

The first alternative appears to be the best solution at the present time. Where private ownership of the access-ways cannot be avoided, the developer should transfer the access-ways in fee simple title to common ownership of the interior lot owners or those property owners affected by lack of access.

The Land Development Plan (figure 4) indicates areas of beach access both now and for future development. Where appropriate, an access way should be located for every 600 feet of water front lots measured parallel to the shoreline.

Community Services

As Holden Beach grows in future years, the Town will find itself pressed to provide more and better facilities and services to its residents both permanent and seasonal. Although the problem of a town providing facilities and services is always difficult, Holden Beach is fortunate in two respects. The Town's size is not too great and the population is not too large to initiate the provisions of some services from the county level. However, it is important to remember that any future facilities should be planned to have minimal visual and physical effects on the environment.

Holden Beach has recognized this situation and as a result has just had a water system engineering report completed for the Town, (see Figure 5). Generally speaking, the water system will utilize Phase II of the Brunswick County Water System as a water supply source for the Town. The initial system will extend from Ocean Boulevard west near tract number one on the west end of the island, to Avenue E on the east end. Several streets and drives will be incorporated along the way including Conch and Canal Drive, High Point Street, Sand Dollar Drive, and Sail Fish Drive. Future expansion is scheduled to include Brunswick Avenue, west of Ocean Boulevard up to tract number nine, and several roads along the intercoastal waterway and canals.

The Town should also look into the feasibility of constructing a sanitary sewer system soon after the initial water system is completed. Although the water system is most important and should be completed first, a sewer system will probably be needed in about eight years if not sooner. Of course this depends upon the rate of development which occurs during the next few years. The increase and density of houses and population of the Town will have the greatest effect on the sewer requirements for Holden Beach.[7]

Transportation

Holden Beach has a total of 22.8 miles of state and municipal roads, with the overwhelming majority (73.2 percent) local road classification. Approximately 6.1 miles (8.1 percent) are state maintained roads, they are Ocean Boulevard (SR 1116) and Jordan Boulevard (NC 130).

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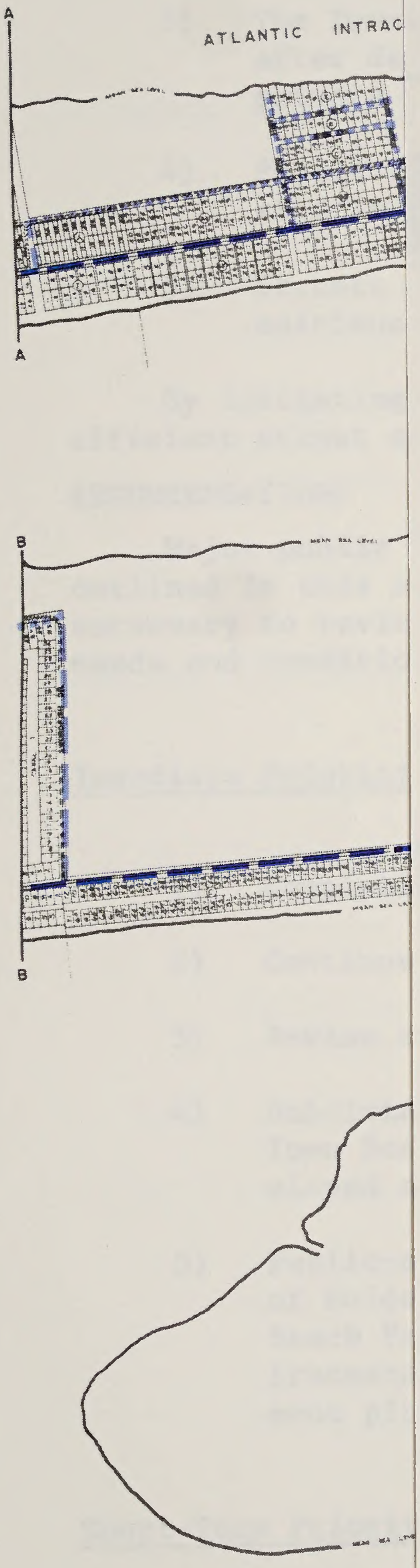
[7] ________, Comprehensive Water and Sewerage Planning Report - Brunswick County, North Carolina, (Henry Von Oesen and Associates) Wilmington, N.C., 1968.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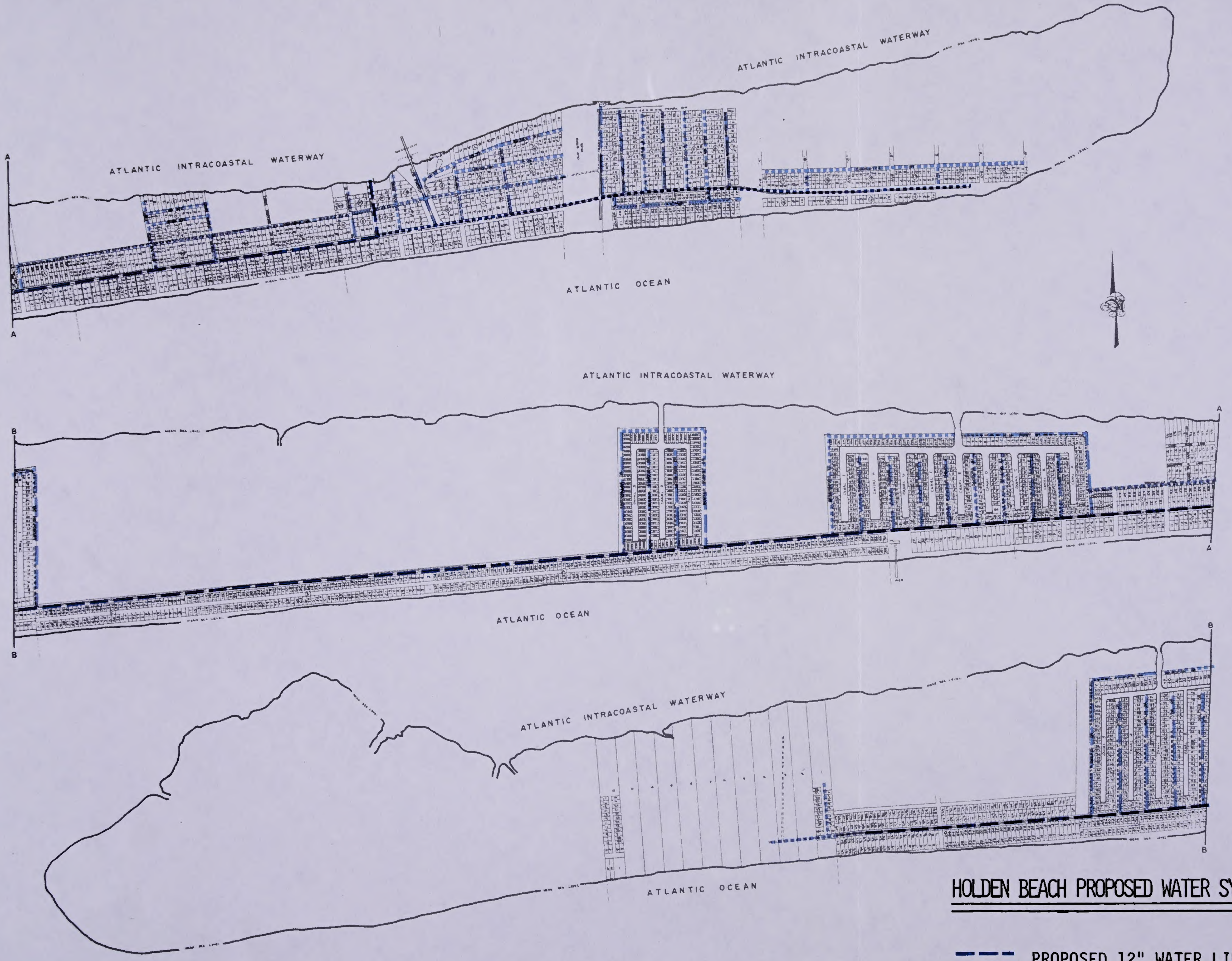
HOLDEN BEACH

NORTH CAROLINA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HOLDEN BEACH PROPOSED WATER SYSTEM

━ ━ ━ PROPOSED 12" WATER LINE

┅┅┅ PROPOSED 8" WATER LINE

━ ━ ━ PROPOSED 6" WATER LINE

┅┅┅ PROPOSED FUTURE WATER LINE

FIGURE 5

HOLDEN BEACH
NORTH CAROLINA

FIGURE 5

With the exception of possible extention of SR 1116, no new roads are planned for Holden Beach by the State Highway Commission.

As far as local municipal roads are concerned, the Town should adopt a policy with regard to street dedication. Several steps should be looked at in this respect:

1) The developer would dedicate the street to the Town.

2) The developer would be responsible for grading and drainage.

3) The Town would be responsible for paving and maintenance of streets after dedication by contracting "out" their Powell Bill money to a private contractor.

4) Powell Bill money cannot be used by developer to maintain private streets.

5) Streets must be paved prior to dedication for State Highway Commission maintenance.

By initiating these kinds of actions, the Town should have a safe and efficient street system during the Planning Period and years beyond.

RECOMMENDATIONS

Major public actions needed to implement the Land Development Plan are outlined in this section. Through succeeding years, the Town will find it necessary to review and modify these recommendations to reflect changing needs and conditions.

Immediate Priorities (1974-1975)

1) Completion of the water system, hopefully by the end of 1975.

2) Continue efforts to resolve the Beach Access problem.

3) Revise and update the Town's Zoning Ordinance.

4) Subdivision Regulations should be established and adopted by the Town Board. It is important that subdivisions be designed and developed according to the best practices available.

5) Public-minded citizens should become involved in the development of Holden Beach. Many other Town organizations, such as the Holden Beach Property Owners Association, church groups, civic groups, and fraternal organizations can participate in implementing the development plan.

Short-Term Priorities (1975-1978)

1) Increased code enforcement should be encouraged.

2) Establish a Recreation Commission for the Town.

3) A feasibility study should be done for the construction of a sanitary sewer system.

4) Increase citizen participation in the Planning Process.

5) Encourage street dedication by developers to the Town.

6) Holden Beach should take necessary steps to exercise extraterritorial jurisdiction.

Intermediate-Term Priorities (1978-1982)

1) Construction of a sanitary sewer system.

2) Develop a comprehensive policy for maintenance and extension of community facilities.

3) As facilities permit, the Town should encourage the use of new growth concepts such as planned unit developments and cluster development.

4) Establish a small library in the Town.

Long-Term Priorities (1982-1994)

1) Continue review and updating of the Land Development Plan.

2) Continuing use of zoning and subdivision regulations (if adopted) as well as other codes. Re-evaluation and updating of these regulations will be necessary.

3) Encourage continuing citizen participation in the planning function of Holden Beach.

4) Extend community services and facilities as necessary.

5) Increased efforts to keep beach erosion at a minimum.

6) Encroachment of residential development or dunes and marshlands should not be allowed.

7) The Town should look at the possibility of hiring a City Manager during this period.

APPENDIX A

ENVIRONMENTAL CONSIDERATIONS

1. Abstract

The Holden Beach Land Use Analysis and Land Development Plan is an examination of the physical features, population and economy, community facilities and services, and current land use to determine the future Land Development Plan to 1994. Emphasis was placed on the preservation of the environmental quality in and around the Town, while allowing coordinated development. Included is a list of Goals for Development together with implementing tools an a priority basis to aid the Town in determining the nature of future land use policies.

2. Environmental Effects

A. Beneficial Effects:

1) The very nature of the plan will allow the Town to control its growth and expand efficiently the services demanded by an increasing population.

2) Provides for more effective use of available land without causing extensive damage to the environment.

3) A street maintenance policy provides good traffic circulation.

4) Increased code enforcement, including the Town's Environmental Impact Ordinance, allows for increased control on orderly growth and development while maintaining the environmental quality of the beach.

5) Encourages good visual aesthetics and overall community appearance.

6) Encourages compatibility with land uses as well as nature.

B. Adverse Effects:

1) Increase in rain water run-off.

2) Removal of some natural vegetation.

3) Until a water and sewer system is available, higher demands will be placed upon existing facilities, including solid waste.

4) Increase in air pollution caused by automobile exhausts.

3. Effects of development which cannot be avoided entirely will be the loss of some natural vegetation and increase in storm run-off and waste products.

4. Alternatives to the proposed plan would be either uncontrolled growth or no growth at all. Uncontrolled growth would cause irreparable damage to the already fragile environment, while no growth at all would cause the Town to vegetate.

5. Relationship Between Short-Term Uses of Environment and Maintenance of Long-Term Productivity.

The plan proposes orderly and systematic growth which will encourage efficient land use and protection of natural features. Over a long period, some vacant areas will be encroached by development, however, through conservation and open space areas, such as sand dunes and marshlands, these areas should remain untouched.

6. Irreversible and Irretrievable Commitment of Resources.

The plan requires the use of some of the Towns sea oats, and possible scenic views. No other resources are planned to be affected by the Plan.

7. Applicable Federal, State, and Local Control.

Federal

National Environmental Policy Act of 1969
Land and Water Conservation Fund Act of 1964
Environmental Quality Act of 1970
Coastal Zone Management Act of 1972
Executive Order 11514, March 1970
Executive Order 11593, May 1971
National Flood Insurance Act of 1968

State

Water Use Act of 1967
North Carolina Environmental Policy Act of 1971
Dredge or Fill Law - General Statutes 113-229
Planning and Regulation of Development, Chpter 160 A, Article 19
Soil Conservation District Law, 1937
Regulation #LXXIX For the Treatment and Disposal of Sewage in the Coastal Areas of North Carolina
Coastal Wetlands Act - General Statutes 113-230 of 1971

Local

Zoning Ordinance
Environmental Impact Ordinance of 1972
Building and Housing Codes
Motor Vehicle Permit for the Strand
Brunswick County Sand Dune Protection Ordinance

8. Mitigation Measures

The adoption and use of the plan by public and private groups and participation by the citizenery will mitigate adverse environmental effects. Continued enforcement and updating of all ordinances will also assist the community in this regard.

9. At the time the plan was being completed, the Coastal Management Bill for North Carolina had not been enacted.

NORTH CAROLINA DEPARTMENT OF NATURAL AND ECONOMIC RESOURCES
James E. Harrington, Secretary

Division of Community Assistance
Robert S. Ewing, Director

Local Planning and Management Services Section
Billy Ray Hall, Chief

Southcentral Field Office
John K. McNeill, Jr., Branch Office Head
Donald L. Dorsch, Project Planner
William C. Burgess, Draftsman
Doris E. Gould, Typist